

3.8-3.12 test review answers

1. 1
2. $\sec^2 x$
3. $2 \sec x$
4. $-\cot^2 x$
5. 1
6. 1
7. work is the answer
8. work is the answer
9. work is the answer
10. work is the answer
11. work is the answer
12. work is the answer
13. $\sin \alpha = -\frac{2\sqrt{5}}{5}$ $\csc \alpha = -\frac{\sqrt{5}}{2}$
 $\cos \alpha = \frac{\sqrt{5}}{5}$ $\sec \alpha = \sqrt{5}$
 $\tan \alpha = -2$ $\cot \alpha = -\frac{1}{2}$
14. $\frac{\sqrt{2}-\sqrt{6}}{4}$
15. $\frac{\sqrt{6}-\sqrt{2}}{4}$
16. $\frac{-\sqrt{3}+1}{1+\sqrt{3}} = -2 + \sqrt{3}$
17. $\frac{\sqrt{6}-\sqrt{2}}{4}$
18. $-\frac{\sqrt{2}}{2}$
19. $\frac{1}{2}$
20. $\frac{-10-12\sqrt{21}}{65}$
21. $\frac{-16\sqrt{2}-15}{51}$
22. $-\sqrt{\frac{2-\sqrt{2}}{4}}$ or $-\frac{1}{2}\sqrt{2-\sqrt{2}}$ or $\frac{-\sqrt{2}-\sqrt{2}}{2}$
23. $\sqrt{2} - 1$
24. $\cos \frac{\alpha}{2} = \frac{\sqrt{6}}{4}$
25. $\sin 2\theta = -\frac{120}{169}$